MINUTES
of the
WATER AND NATURAL RESOURCES COMMITTEE

October 16-17, 2003
Room 307, State Capitol

The October 16 meeting of the Water and Natural Resources Committee was called to order by Senator Carlos R. Cisneros, chair, at 10:20 a.m. in Room 307, State Capitol.

PRESENT
Sen. Carlos R. Cisneros, chair
Rep. Joe M Stell, vice chair
Sen. Sue Wilson Beffort (10-17)
Rep. Joseph Cervantes
Sen. Dede Feldman (10-16)
Sen. Mary Jane M. Garcia
Rep. Larry A. Larranaga
Rep. James Roger Madalena
Rep. Andy Nunez
Sen. Mary Kay Papen
Sen. H. Diane Snyder
Rep. Don Tripp (10-16)

ABSENT
Sen. Joseph J. Carraro
Rep. Dona G. Irwin
Rep. Brian K. Moore
Sen. Shannon Robinson
Rep. Henry Kiki Saavedra
Rep. Robert White

Advisory Members
Rep. Anna M. Crook
Rep. Rhonda S. King
Rep. Ben Lujan
Rep. Danice Picraux
Sen. Nancy Rodriguez
Rep. Mimi Stewart
Sen. Leonard Tsosie (10-16)
Rep. Eric A. Youngberg

Rep. Ray Begaye
Sen. Clinton D. Harden, Jr.
Sen. Timothy Z. Jennings
Sen. Gay G. Kernan
Sen. Steve Komadina
Sen. Leonard Lee Rawson

(Attendance dates are noted for those not present for the entire meeting.)

Staff
Gordon Meeks
Jon Boller

Guests
The guest list is in the meeting file.

Thursday, October 16

DROUGHT TASK FORCE REPORT

Dennis Romero of the Office of the State Engineer explained the current drought conditions to the committee. He said that temperatures have been one to four degrees above normal across much of the state, and that July was one of the warmest on record. He said that although precipitation in October has been above normal, from January through August the state was below normal. The Palmer Drought Index has been negative for all climatic regions of the state through August. Reservoir storage in the state is reaching levels not seen since the 1950s and 1970s, and stream flows are well below the 108-year average. Forecast conditions from the Pacific Decadal Oscillation (PDO) are indicating that the region is entering a prolonged drought. The National Oceanic and Atmospheric Administration is also predicting a persistent drought in the southwest. He said that New Mexico would need an average runoff for 20 years to refill Elephant Butte Reservoir. He concluded with the statement that the state is in the middle of a drought, and it needs to mitigate the negative effects and continue planning for long-term drought.

Anne Watkins, special assistant to the state engineer, said that whatever the current situation is, it is common knowledge that the southwest experiences periodic drought, and that there will be a mega-drought someday. Therefore, the state needs to prepare for recurring drought. She explained the five stages of drought, noting that New Mexico is now in the fifth stage, which is the administrative response stage. The governor's Drought Task Force is shifting its focus from emergency response to identifying vulnerabilities to drought and preparing mitigation and management plans. The task force has created several working groups, including a strike team for emergency response, a monitoring work group, a drinking water work group, an agricultural work group, a wildlife and wildfire work group and a recreation, economic development and tourism work group. Each group focuses on strategies to respond to and plan for the effects of drought and to mitigate the socioeconomic impact of drought.

Questions and discussion from the committee addressed:

- that 75 water systems are at risk and the need exists for more collaboration among small water systems, and the need to encourage more regional solutions in both the planning of water systems and the actual delivery of water;
- the state's responses to the droughts of the 1950s and 1970s;
- the need to plan for water development in the state's capital planning process;
- how it is getting so that those who can pay get water, and long-time residents cannot afford water; and
- the hardest hit by drought are the recreation-based businesses, farmers and ranchers and small communities that need drinking water.

John D'Antonio, state engineer, explained the different stages of drought, noting that New Mexico is in the socioeconomic stage, where it is suffering the impact of the drought and that the

state is responding administratively. He listed several stream systems where shortage sharing must be put into effect. These areas are the San Juan River, the Animas and LaPlata rivers, the Rio Chama, Nambe, Pojoaque, Tesuque, Mora, the Gallinas River, the Mimbres River, the Canadian River and the Rio Penasco. He said that monitoring and metering systems will be needed in these areas. Mr. D'Antonio said that existing statutory authority will be used to appoint water masters to these areas and promulgate rules for administration in each area under the authority granted to him by existing statutes. He said that a manual will be published to describe how each area will be administered to ensure that due process is followed. Administration of these areas will include expedited transfers and enhanced enforcement of existing laws against wasting water and illegal diversions. He said that regarding the silvery minnow, the current biological opinion allowing the river to dry up at certain times gives New Mexico a little breathing room. Construction of a refugio is ensuring that the species survives during these times.

Questions and discussion from the committee addressed:

- drought as a more normal condition than wet years and that the state probably exceeded its sustainable population 20 years ago;
- the duration of any priority administration;
- how much brackish water is available that can be used and environmental issues of dealing with waste byproducts of brackish water treatment; and
- water master duties and flexibility in solving conflicts on local level.

FINANCING WATER MANAGEMENT NEEDS

David Harris, director, and Carlos Romero, legislative liaison, both of the New Mexico Finance Authority, told the committee that there are billions of dollars of unfunded water project needs throughout the state. Mr. Harris said the governor's office has requested Congress to come up with $500 million over the next 10 years, which could match state funding sources over this period. He suggested that the legislature could send a memorial to Congress to encourage this. After discussing the dedication of 10 percent of severence tax revenues or a portion of the state's general obligation bonding capacity to water exclusively, Mr. Harris indicated the possibility of leveraging the California congressional delegation, which wants its CalFed project funded, to include New Mexico's water needs in its legislation. He emphasized, however, that New Mexico needs to have state funding and plans in place to convince Congress that the state is serious about these projects.

Questions and discussion from the committee focused on:

- how the Department of Transportation got a 10-year commitment from the federal government for debt servicing of bonds;
- the lack of federal money being distributed for the South Valley water project despite Congress' approval;
- how water treatment and supply projects have traditionally been local projects and

would change the role of the state;

- the Water Trust Board as the fiscal agent for the federal money and the need to spend as projects are needed because there are so many projects that are needed now;
- Navajo and Ute projects are $800 million right off the bat, yet little projects often eat up the fund; and
- over the last four years about $120 million has gone to small water systems; however, getting federal matching funds and diverting the money to big projects could jeopardize completing small water system projects.

FOREST MANAGEMENT PROTOCOLS

Butch Blazer, state forester, told the committee that federal, state and local land management agencies have made a full commitment in allowing the state forester to take the lead in formulating a comprehensive plan for forest watershed restoration and management. He said that tree densities throughout the state are too high and the extensive bark beetle infestation of New Mexico forests is a sign of this. He described how the City of Ruidoso and the Mescalero Apache Tribe collaboration on forest management is a good example of how cooperation among governing jurisdictions can work. He said that, ironically, the fires in the bosque in Albuquerque may help bring funds for its restoration. He said he has a commitment from the U.S. Forest Service that its national fire plan will support the state's plan.

Questions and discussion from the committee dealt with:

- the economic viability of watershed restoration and the need for government subsidies; and
- how the Mescalero Apache Tribe's projects are subject to environmental laws and how the use of science, not economics, guides its policies.

RURAL WATER SYSTEMS ISSUES

Mary Humphrey, attorney for several mutual domestic water users' associations, explained that there is a difference between different public water supply systems under different federal and state laws, that community water systems and mutual domestic water users' associations are not the same legal entities with the same status under state law. She said that not all public water systems under federal definitions are "public" systems, and went on to describe the different kinds of water systems in the New Mexico statutes. She said that the Public Regulation Commission oversees some of these entities, but not all. She continued to explain the role of mutual domestic water users' associations and a brief history of their existence. She said there is a critical need for a single state-level oversight board. A significant problem has been the amount of water rights allocated to mutual domestics by the Office of the State Engineer. These decisions have not been based on actual history and have been out of sync with what other systems have been allowed. To qualify for federal funding, systems must have proof of water rights. Mutual domestics are the oldest water systems in the state and are mostly in the north, but the Office of the State Engineer has denied some of these oldest users their

historic water rights.

Matthew Holmes, executive director of the Rural Water Users' Association, summarized federal laws affecting rural users. He said that the cost of compliance with the federal Safe Drinking Water Act of 1974 is huge. There are 91 contaminants that must be tested for under the act. For example, he said that all systems must comply with the new arsenic standards by 2006. The cost of compliance for small New Mexico systems might be as high as between $374 million to $474 million, with $16 million in yearly operating costs. This translates into $100 per month more in homeowner bills for the arsenic rule alone. New Mexico is estimated to bear 34 percent of the burden of compliance nationwide. But there are many more new rules coming in the next few years from the federal Environmental Protection Agency.

Ms. Humphrey said that most of these systems are falling apart; they are often run by volunteers; and the board members are aging, and no one wants to replace them.

Juan Garcia, a board member of a mutual domestic water association near El Rito, said that his mutual domestic relies on shallow wells and old failing, insufficient lines, and it still has to comply with Safe Drinking Water Act regulations and the new Homeland Security Act rules. He said the federal government demands that systems put up water rights in exchange for federal funding, and not everyone wants to do that. The state needs to look at these systems and how to make them work for the future.

Ben Chavez from Mora told the committee that septic systems installed in the 1940s and 1950s are now polluting the aquifer. Mora has been offered a $5 million grant for a water treatment plant, but it would cost $197,000 a year to operate, and there are not enough customers to pay for that. He said that mutual domestics started out with neighbors sharing the costs of pumping water to their houses, but the mutual domestics are now being asked to solve problems they were not designed to solve.

Questions and comments from the committee addressed:

- the potential for regionalization and collaboration among communities;
- the nature of federal assistance and eligible expenses;
- institutional support, such as an ombudsman, to help in the training of boards for compliance with the Open Meetings Act, water quality standards and federal requirements; and
- the difference in authority between the Office of the State Engineer and the Department of Environment.

CRITICAL MANAGEMENT AREAS

Paul Saavedra and Tom Morrison from the Hydrology Unit of the Office of the State Engineer told the committee that a critical management area (CMA) is declared in an area that is in danger of losing its water — that is, an area where wells are likely to go dry. The main

responsibility is to ensure that there is no impairment of existing wells when there is no unappropriated water left in the area. These are typically areas of heavy use and ground water withdrawal rates that constitute mining. They said there are CMAs designated for six alluvial basins in the state. In these areas, while domestic well use is pretty minor, CMA designations exist because of huge allocations from agricultural or municipal users, which result in no other appropriation being feasible without affecting existing appropriators. Albuquerque wells have dropped 100 feet since the 1960s, but wells in Estancia Valley have fallen seven feet a year in some places. The boundary of a CMA will be defined in formal guidelines after public input. A CMA will only affect pending applications or changes in existing wells. The state engineer is still required to issue domestic well permits, but may limit the amount allowed to be pumped in a year, say to 0.5 acre-feet instead of the usual three.

In addition to CMAs, there are special administration areas, often due to court orders or due to contamination. They said that even though domestic wells account for less than one percent of the state's water usage, these wells may present problems in specific areas, especially if they are close to a stream or acequia. Domestic wells account for 16,000 acre-feet per year in consumptive use in the state, and this will increase since the Office of the State Engineer had 8,000 applications for domestic wells last year. There are 36,000 wells within one mile of streams or acequias, which come directly out of those surface sources. There are a total of 137,000 thousand domestic wells in the state.

Questions and discussion addressed:

- the number of domestic wells that are metered;
- how much use is due to domestic wells and if they are a problem or not — in some areas, domestic wells account for 90 percent of the draw down;
- how much would metering cost;
- comparison of domestic well use with municipal use — 120,000 acre-feet annually for Albuquerque versus 40,000 acre-feet statewide by domestic wells;
- that Intel uses about 160 acre-feet per year while a quarter of the land irrigated in Estancia Basin uses that much — huge disparity in what that amount of water can be used for and its economic effects;
- how the effect on property values can be manipulated by definition of where CMA boundaries are drawn;
- the discretion of the Office of the State Engineer;
- the nature of an enforcement system if meters are installed;
- a permit fee increase from $5.00 to $500 to generate $2 million or $3 million; and
- that an alternative to changing the ground water well law is to enforce the existing law that provides for priority enforcement against those who impair existing senior rights.

The committee recessed at 4:30 p.m.

Friday, October 17

PRODUCED WATER

Marc Christensen, Public Service Company of New Mexico (PNM), and John Gillis of PNM addressed the committee about the use of produced water for cooling at the San Juan power plant. PNM wants to supplement water supply for cooling at the plant to ensure that the plant can remain at full production even if there is a water shortage in the San Juan River. They said that PNM would like to treat about 3,000 acre-feet per year, which is 14 percent of the 22,000 acre-feet used annually by the plant. PNM would have to build a pipeline of approximately 35 miles in length to transport the water from the Aztec area to the plant. Waste from treating the water would be disposed of at the plant site. The estimated cost of the project is approximately $40 million, with water being delivered at about $2,000 per acre-foot. The company wants to have a treatment system in operation by the summer of 2004. Mr. Christensen asked the committee to support legislation that will provide for a $1,000 per acre-foot tax credit. He said that PNM is also asking the legislature to clarify the regulatory structure of produced water. The federal Department of Energy has given PNM $400,000 to study this proposal.

Questions and discussion by the committee addressed:

- the scope of the proposed legislation;
- the effect of preexisting pipeline problems in the San Juan area;
- the position of the Office of the State Engineer on this legislation;
- if California or New Mexico benefits from having a net increase in the flow of the San Juan River;
- the status of a settlement with the Navajo Nation on its water rights claims;
- the ability of the state to buy water from the project if needed;
- how much produced water is in the state (80,000 acre-feet);
- a cap on the total value of the tax credit;
- regulatory authority of produced water; and
- the potential to use less water in the cooling process.

STATUS OF WATER CONSERVATION FUND

Ana Marie Ortiz, Department of Environment, explained the purposes and uses of the Water Conservation Fund, which is appropriated to the department for the administration of public water supply programs throughout the state. Money from the fund, along with federal matching funds, is used to ensure compliance with the federal Safe Drinking Water Act. A decreasing level of federal funding, along with new regulations requiring more sampling, has resulted in increased demands on the fund and the need for a general appropriation request for the Drinking Water Bureau of the department.

Ken Smith, fiscal manager for the Drinking Water Bureau of the Department of Environment, reviewed the budget and fiscal status of the Drinking Water Bureau. He noted that costs were up 12.2 percent and revenues were down 6.2 percent. He also presented projections

on the health of the Water Conservation Fund under various scenarios. He and Ms. Ortiz urged the committee to support the bureau's continued management of the fund and its request for general appropriation funding.

Questions and discussion by the committee addressed:

- how much the City of Albuquerque contributes to the fund compared to the rest of the state and how much the city benefits compared to the state;
- whether diversion of San Juan-Chama water will result in more testing and arsenic treatment expenditures; and
- new regulations and decreased federal funding.

UTILITY WORKERS CERTIFICATION

Charles Lundstrom, Department of Environment, told the committee that the utility workers certification program is currently operating without a dedicated funding source. He said the department is working with the Water Quality Control Commission on needed changes to the utility workers certification statutes. He explained that the department has worked with the affected various groups and agencies to come up with proposed changes acceptable to all parties. He also discussed earmarking fees for administration and enforcement rather than these fees going into the general fund as they currently do.

Questions and discussion addressed:

- the percentage of the program the fees will cover; and
- concerns about temperature, turbidity and oxygenation levels as they relate to the operation of dams.

DESALINATION PROSPECTS

Mike Hightower, Sandia National Laboratories (SNL), explained that there is a growing concern over diminishing supplies of fresh water worldwide. SNL is involved in studying nontraditional sources of fresh water and, in particular, desalination of brackish water. Currently, desalination plants worldwide supply about one percent of the world's drinking water, mostly from large-scale seawater desalination plants. There is a lot of brackish water in New Mexico, and SNL is involved in research in the Tularosa Basin, which will be a national and international resource for treatment of brackish water and disposal of waste concentrate. Alamogordo, Horizon City and El Paso are all looking at desalination as a source of drinking water. SNL is also involved in the national arsenic treatment technology development program and would like to formulate a program to assist New Mexico communities and state agencies in treating impaired water.

Bill McCamley, a candidate for the Dona Ana County Commission, described the work he did on his graduate research paper at Harvard. He looked at water problems worldwide, with a focus on New Mexico, noting that the population increased by 20 percent in the last 10 years,

and that it will probably continue to do so. He also examined the situation in Tampa Bay, Florida, San Diego, Texas and Israel. Other states have regional water organizations that increase their bonding capacity to help pay for water projects. This may be a good approach for New Mexico, along with better access to information on desalination. Short-term recommendations include establishment of a statewide water plan, financing a brackish water survey, financing the Water Resources Research Institute at New Mexico State University as a clearinghouse for information, creating regional water authorities and provisioning financial packages to help build desalination facilities.

Peter Davies, SNL, urged the committee to support a bill providing for a tax credit to encourage SNL to establish an impaired water treatment program.

Questions and discussion by the committee addressed:

- whether gross receipts tax breaks actually return benefits to the state;
- the cost of water desalination (probably $3.00 to $4.00 per 1,000 gallons depending on concentrations of contaminants in the brackish water);
- military bases' involvement in funding some of these projects; and
- Texas taking water from Alamogordo.

SCIENTIFIC INFORMATION REQUIRED FOR THE STATE WATER PLAN

Dr. Jim Gosz and Dr. Rob Bowman described the EPsCOR plan to study evapotranspiration in the middle Rio Grande and its application for a National Science Foundation grant in 2004. They said they would work with Legislative Council staff to prepare a bill to present to the committee in November.

A motion to adopt minutes carried without objection.

The meeting adjourned at 2:30 p.m.

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